Suicide Deaths, California 2000

By Cheryl Wilson

H i g h l i g h t s

- **Suicide continued to rank 10th among the leading causes of death in California and 11th in the United States.**

- **In 2000, firearms accounted for 47.8 percent of the total suicide deaths in California.**

- **Among California residents, Whites had 73.4 percent of all suicide deaths in 2000.**

- **California has not yet met the Healthy People 2010 National Objective of an age-adjusted death rate of no more than five deaths per 100,000 population.**

Introduction

For the second consecutive year, suicide ranked 10th among the leading causes of death in California and 11th in the nation.[1,2] In 2000, suicide deaths among California residents increased 2.2 percent from 3,047 deaths in 1999 to 3,113 in 2000.[3,4] However, in the United States, suicide deaths decreased 3.0 percent from 29,199 deaths in 1999 to 28,332 in 2000.[2,5]

Suicide is a complex behavior that has been related to multiple risk factors, which vary with age, gender, and race/ethnicity. Persons who commit suicide often suffer from depression or another diagnosable mental or substance abuse disorder.[6]

In 2000, firearms accounted for more than half (57.9 percent) of all suicide deaths in the United States.[2] During this year, 47.8 percent of the total suicide deaths in California were committed by firearm.   In California, males and females differed in their predominant methods used in suicide deaths. The largest proportion of male suicide deaths (53.4 percent) was by firearm, while females used poisoning (35.3 percent) as the most common method, followed by firearms (28.0 percent). From 1999 to 2000, suicide deaths by firearms declined 3.6 percent among all California residents. Among males and females in California, firearm related suicide deaths were down 2.0 percent among males and 10.0 percent among females. Some of the other methods used to commit suicide include strangulation, jumping, cutting, and piercing.[3,4]

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[1]Ficenec S. *Advance Report: California Vital Statistics*, Preliminary Data for *2000*. Center for Health Statistics, California Department of Health Services. May 2002.

[2]National Center for Health Statistics, Deaths: Preliminary Data for 2000, *National Vital Statistics Reports,* DHHS Pub. No. (PHS) 2001-1120, PRS 01-0599 (10/2001).

[3]State of California, Department of Health Services, Death Records. 1999.

[4]State of California, Department of Health Services, Death Records. 2000.

[5]National Center for Health Statistics, Deaths: Final Data for 1999, *National Vital Statistics Reports,* DHHS Pub. No. (PHS) 2001-1120, PRS 01-0573 (9/2001).

[6]National Institute of Mental Health. Suicide. *In Harm's Way: Suicide In America*. NIH Publication No. 01-4594. 1997.

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HEALTH AND HUMAN SERVICES AGENCY
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Due to the prevalence of suicide in this country, the United States Public Health Service established a health objective for Healthy People 2010, seeking to reduce the number of suicide deaths to an age-adjusted rate of no more than 5.0 per 100,000 people.[7]

This report presents data on California's suicide deaths for 2000, and provides analysis of crude and age-adjusted death rates for California residents by sex, age, and race/ethnicity. The suicide data included in this report are extracted from vital statistics records with death attributed to suicide as defined by the International Classification of Diseases, Tenth Revision (ICD-10) codes X60-X84, Y87.0 in accordance with the National Center for Health Statistics Reports.[8]
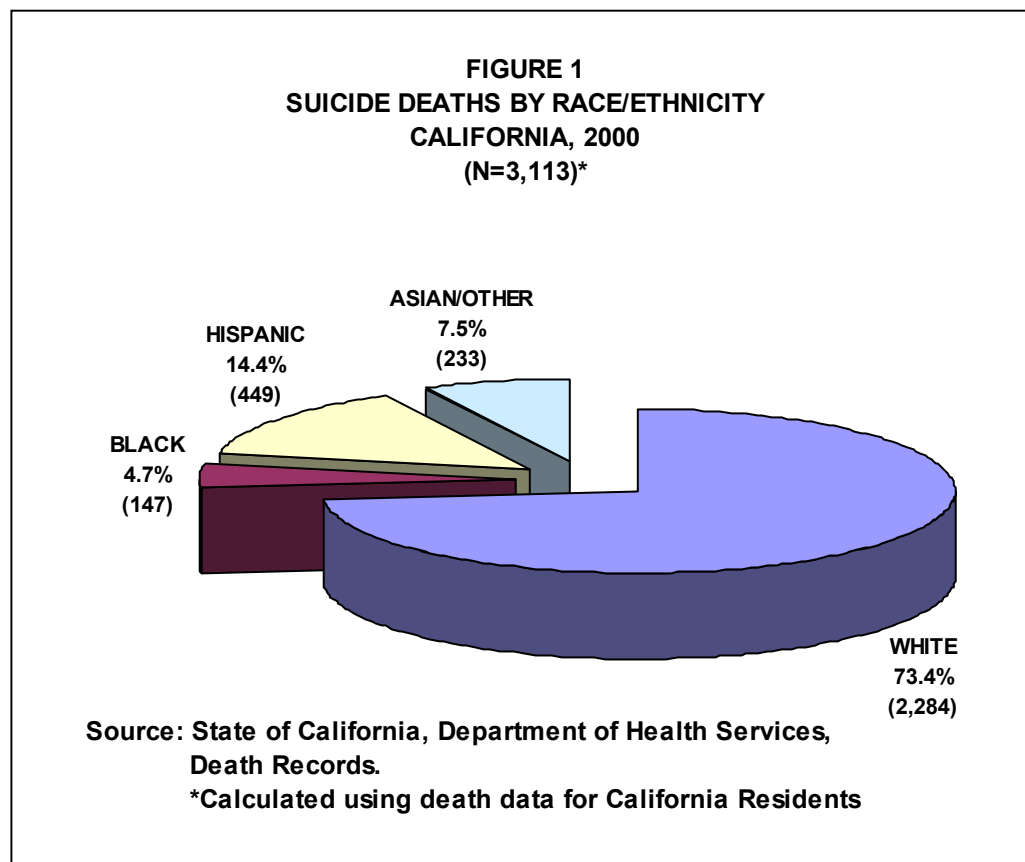
Suicide Deaths

Table 1 (page 9) shows California's suicide death data by race/ethnicity, age group, and sex. In 2000, California residents in the age group 35 to 44 had the largest number of suicide deaths (653), followed by those in the 45 to 54 age group (589), and the 25 to 34 age group (499).

In 2000, California's male residents had 78.1 percent of the total suicide deaths and females had 21.9 percent. Among the age groups listed in **Table 1** (page 9), the gender difference was greatest among California's males and females in the age group 75 to 84, with males having 6.1 suicide deaths for every female death. Overall, the suicide death ratio was 3.6 male deaths for every female death.

Figure 1 shows Whites had the highest percentage of suicide deaths in California (73.4), followed by Hispanics (14.4), Asian/Other (7.5), and Blacks (4.7).

Similar to California residents, suicide deaths were higher among

FIGURE 1
SUICIDE DEATHS BY RACE/ETHNICITY
CALIFORNIA, 2000
(N=3,113)*

ASIAN/OTHER 7.5% (233)

HISPANIC 14.4% (449)

BLACK 4.7% (147)

WHITE 73.4% (2,284)

Source: State of California, Department of Health Services, Death Records.
*Calculated using death data for California Residents

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[7] United States Department of Health and Human Services. *Healthy People 2010 Objectives* (Second Edition, in Two Volumes). Washington, D.C., January 2001.
[8] National Center for Health Statistics. *Vital Statistics, Instructions for Classifying the Underlying Cause of Death.* NCHS Instruction Manual, Part 9. Hyattsville, Maryland: Public Health Service, 1999.

males than females for each of the major race/ethnic groups. White males had the highest number of suicide deaths (1,787) or 57.4 percent of the total suicide deaths among California residents and White females had the highest number of all female (497) deaths or 16.0 percent.
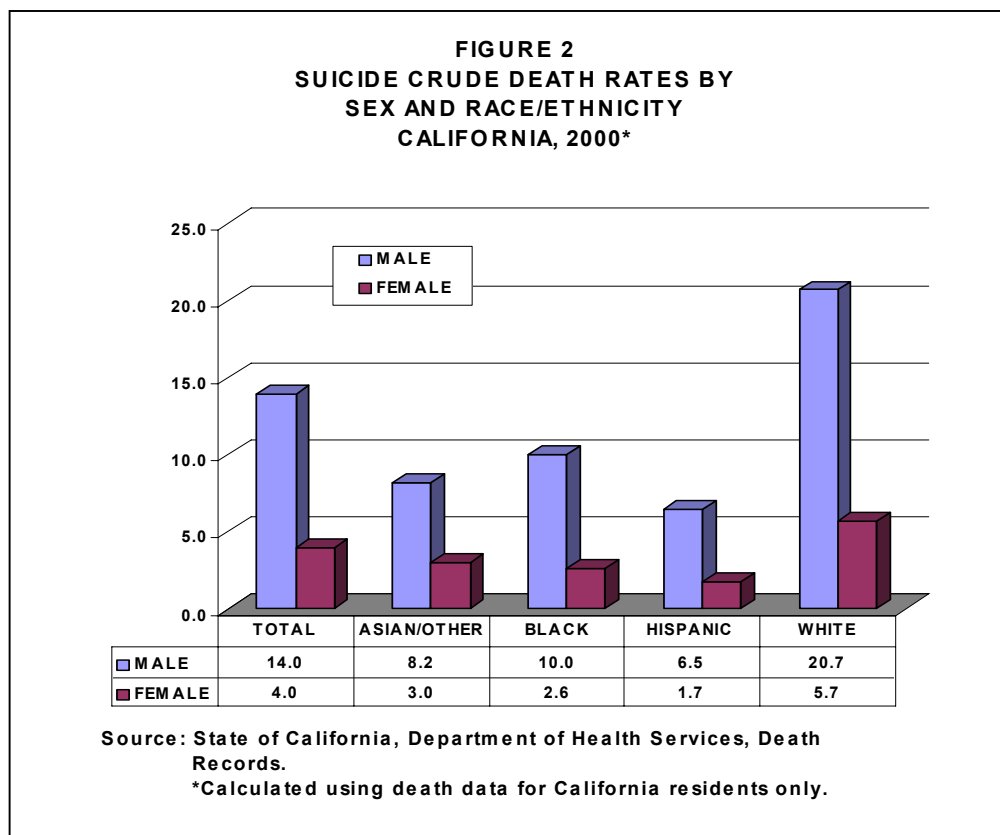
Suicide Crude Death Rates

As displayed in **Table 1** (page 9), California had a suicide crude death rate of 9.0 per 100,000 population in 2000. Among the major race/ethnic groups, Whites had the highest crude death rate (13.1), followed by Blacks (6.3), Asian/Other (5.5), and Hispanics (4.2). The crude death rate for Whites was 3.1 times higher than the rate for Hispanics, 2.4 times higher than Asian/Other, and 2.1 times higher than Blacks.

Figure 2 shows, among California residents, males had an overall crude death rate of 14.0 per 100,000 population compared with females who had a rate of 4.0.

White males had the highest crude death rate (20.7), followed by Black males (10.0),

FIGURE 2
SUICIDE CRUDE DEATH RATES BY SEX AND RACE/ETHNICITY CALIFORNIA, 2000*

	TOTAL	ASIAN/OTHER	BLACK	HISPANIC	WHITE
MALE	14.0	8.2	10.0	6.5	20.7
FEMALE	4.0	3.0	2.6	1.7	5.7

Source: State of California, Department of Health Services, Death Records.
*Calculated using death data for California residents only.

Asian/Other males (8.2), and Hispanic males (6.5). Among females, Whites also had the highest rate (5.7), followed by Asian/Other (3.0), Blacks (2.6), and Hispanics (1.7).

The difference in crude death rates between males and females in California and within each specific race/ethnic group were statistically significant.

Suicide Age-Specific Death Rates

Table 1 (page 9) shows that among the reliable age-specific death rates in California, the highest rate (24.5 per 100,000 population) occurred among people in the age group 75 to 84, and the lowest reliable rate (0.4) occurred in the age group 5 to 14.

Among male residents, the highest reliable age-specific death rate occurred in the 85 and older age group (60.4 per 100,000 population) and the lowest reliable rate (11.2)

occurred in the 15 to 24 age group. Among females, the highest reliable age-specific rate (7.2) was in the 45 to 54 age group, and the lowest reliable rate (2.7) was in the 15 to 24 age group. Overall, males had significantly higher age-specific death rates than females for all age groups.
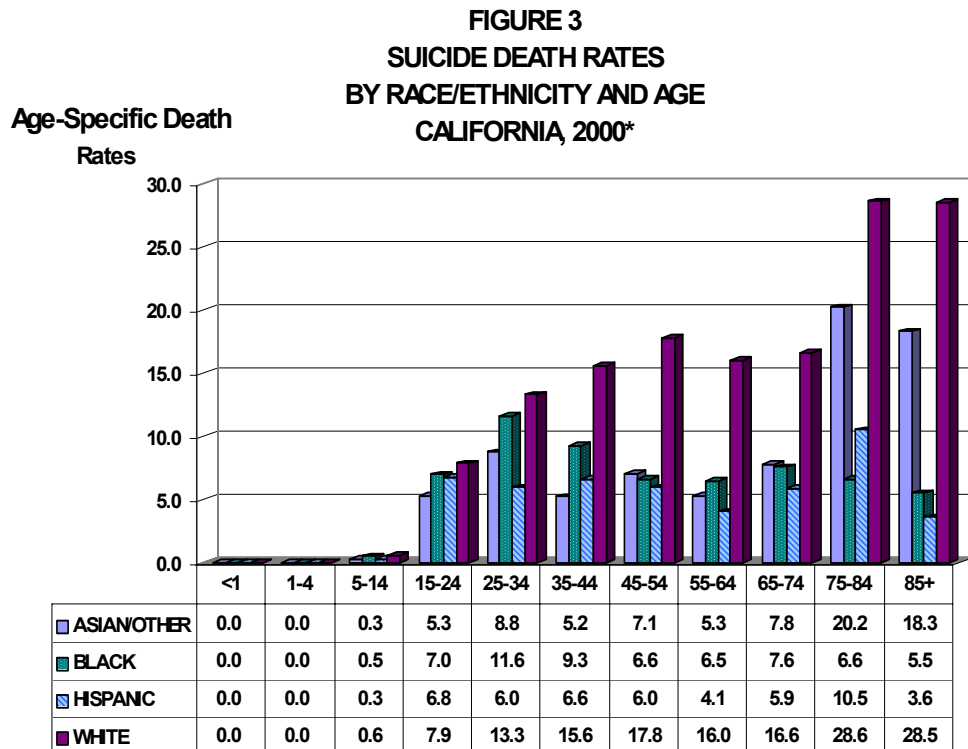
FIGURE 3
SUICIDE DEATH RATES
BY RACE/ETHNICITY AND AGE
CALIFORNIA, 2000*

	<1	1-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
ASIAN/OTHER	0.0	0.0	0.3	5.3	8.8	5.2	7.1	5.3	7.8	20.2	18.3
BLACK	0.0	0.0	0.5	7.0	11.6	9.3	6.6	6.5	7.6	6.6	5.5
HISPANIC	0.0	0.0	0.3	6.8	6.0	6.6	6.0	4.1	5.9	10.5	3.6
WHITE	0.0	0.0	0.6	7.9	13.3	15.6	17.8	16.0	16.6	28.6	28.5

Source: State of California, Department of Health Services, Death Records.
*Calculated using death data for California residents only.
Note: Some of the rates displayed in this table are unreliable (see Table 1, page 9).

 Figure 3 shows Whites had the highest reliable age-specific death rates among all race/ethnic groups in the age groups 15 to 24 through 85 and older. Blacks had the second highest reliable rates for age groups 15 to 24, 25 to 34, and 35 to 44. Asian/Other had the second highest reliable rates in the 45 to 54 and 75 to 84 age groups. Hispanics had the lowest reliable age-specific death rates for all race/ethnic groups in the 25 to 34, 45 to 54, 55 to 64, and 65 to 74 age groups.

Suicide Age-Adjusted Death Rates

Table 1 (page 9) shows California's age-adjusted death rate in 2000 was 9.4 per 100,000 population. California has not yet met the Healthy People 2010 National Objective of reducing the number of suicide deaths in the United States to an age-adjusted rate of no more than 5.0 deaths per 100,000 population.[2,7,9]

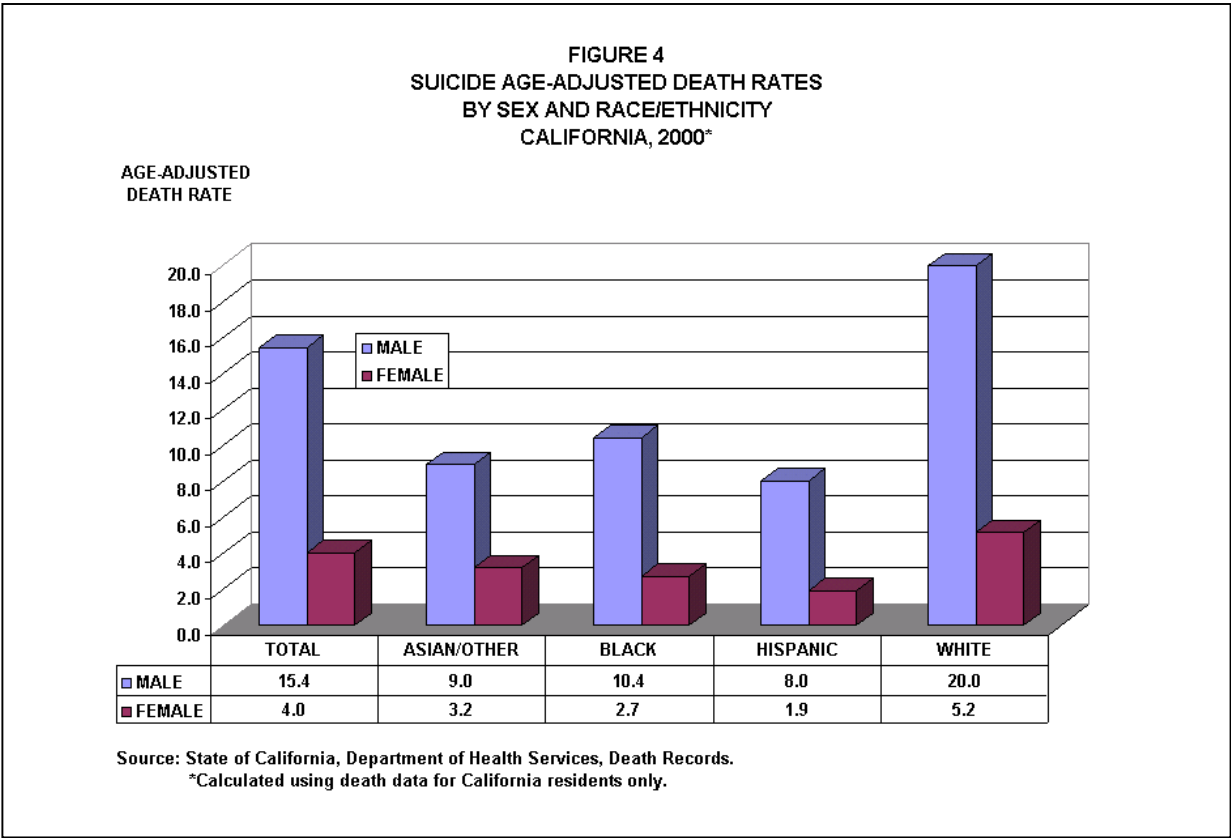Among the major race/ethnic groups, Whites had the highest age-adjusted death rate (12.2), which was significantly greater than the rates for Blacks (6.5), Asian/Other (5.9), and Hispanics (5.0).

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[9] Klein RJ, Schoenborn, CA. Healthy People 2010 Statistical Notes: *Age Adjustment using the 2000 Projected U.S. Population.* National Center for Health Statistics, DHHS Publication, No. 20. January 2001.

Figure 4 shows suicide age-adjusted death rates among California residents by race/ethnicity and sex. In 2000, the male age-adjusted death rate of 15.4 was significantly greater than the female rate (4.0). The male age-adjusted rate was 3.9 times greater than the female rate.

Among the major race/ethnic groups, males had significantly higher age-adjusted death rates than their female counterparts. The ratios of male to female age-adjusted death rates were 2.8 to 1 among Asian/Other, 3.9 to 1 among Blacks, 4.2 to 1 among Hispanics, and 3.8 to 1 among Whites.

FIGURE 4
SUICIDE AGE-ADJUSTED DEATH RATES
BY SEX AND RACE/ETHNICITY
CALIFORNIA, 2000*

AGE-ADJUSTED DEATH RATE

	TOTAL	ASIAN/OTHER	BLACK	HISPANIC	WHITE
MALE	15.4	9.0	10.4	8.0	20.0
FEMALE	4.0	3.2	2.7	1.9	5.2

Source: State of California, Department of Health Services, Death Records.
*Calculated using death data for California residents only.

Suicide Death Rates for California Counties

Table 2 (page 10) shows the average number of suicide deaths, crude death rates, and age-adjusted rates for California and by county for 1999-2000.

Among the 30 counties with reliable rates, Shasta County had the highest crude death rate (18.4) per 100,000 population, which was 2.9 times higher than the lowest rate of 6.3 in Monterey County.

Shasta and Monterey Counties also had the highest and lowest reliable age-adjusted death rates, 18.4 and 6.8 respectively.

The Healthy People 2010 National Objective to reduce suicide deaths to an age-adjusted rate of no more than 5.0 deaths per 100,000 population was met by three counties (none with reliable age-adjusted death rates), but was not met by California as a whole, which had an age-adjusted death rate of 9.5.

Suicide Deaths Among the Three City Health Jurisdictions

Table 3 shows the average 1999-2000 suicide deaths and crude death rates for California's three city health jurisdictions.

Age-adjusted death rates were not calculated for city health jurisdictions because city population data by age are not available.

TABLE 3
SUICIDE DEATHS
AMONG THE CITY HEALTH JURISDICTIONS
CALIFORNIA, 1999-2000*

CITY HEALTH JURISDICTION	AVERAGE NUMBER OF DEATHS	1999 POPULATION	CRUDE DEATH RATE
BERKELEY	7.0	102,200	6.8 *
LONG BEACH	42.5	451,500	9.4
PASADENA	14.5	132,200	11.0 *

Note: Rates are per 100,000 population; ICD-10 codes X60-X84, Y87.0.
 *Death rate unreliable (relative standard error is greater or equal to 23%).
 **Calculated using death data for California residents only.
Source: State of California, Department of Finance, E-4 Historical City/County Population Estimates 1991-2000, with 1990 and 2000 Census Counts, March 2002.
 State of California, Department of Health Services, Death Records.

Long Beach had the highest average number of deaths (42.5), followed by Pasadena (14.5), and Berkeley (7.0).

Among the crude death rates, Long Beach had the only reliable rate at 9.4 per 100,000 population.

Methodological Approach

The methods used to analyze vital statistics data are important. Analyzing only the number of deaths has its disadvantages and can be misleading because the population at risk is not taken into consideration. Crude death rates show the actual rate of dying in a given population, but because of the differing age compositions of various populations, crude rates do not provide a statistically valid method for comparing geographic areas and/or multiple reporting periods. Age-specific death rates are the number of deaths per 100,000 population in a specific age group and are used along with standard population proportions to develop a weighted average rate. This rate is referred to as an age-adjusted death rate and removes the effect of different age structures of the populations whose rates are being compared. Age-adjusted death rates therefore provide the preferred method for comparing different race/ethnic groups, sexes, and geographic areas and for measuring death rates over time. The 2000 population standard is used as the basis for age-adjustments in this report.

Data Limitations and Qualifications

The suicide death data presented in this report are based on the vital statistics records with ICD-10 codes X60-X84, Y87.0 as defined by the National Center for Health Statistics.[10] Deaths by place of residence means that the data include only those deaths occurring among residents of California and its counties, regardless of the place of death.

The term "significant" within the text indicates statistically significant based on the difference between two independent rates ($p < .05$).

As with any vital statistics data, caution needs to be exercised when analyzing small numbers, including the rates derived from them. Death rates calculated from a small number of deaths and/or population tend to be unreliable and subject to significant variation from one year to the next.   To assist the reader, 95 percent confidence intervals are provided in the data tables as a tool for measuring the reliability of death rates. Rates with a relative standard error (coefficient of variation) greater than or equal to 23 percent are indicated with an asterisk (*).

Beginning in 1999, cause of death is reported using ICD-10.[11] Cause of death for 1979 through 1998 was coded using the International Classification of Diseases, Ninth Revision (ICD-9). Depending on the specific cause of death, the number of deaths and death rates are not comparable between ICD-9 and ICD-10. Therefore, our analyses do not combine both ICD-9 and ICD-10 data.

The variability of the rates has increased in **Tables 2 and 3** because of the unavailability of earlier years of data. Three-year average numbers using ICD-10 coding for cause of death will reduce this problem when the data are available in 2002.

The four race/ethnic groups presented in the table are mutually exclusive. White, Black, and Asian/Other exclude Hispanic ethnicity, while Hispanic includes any race/ethnic group. In order to remain consistent with the population data obtained from the Department of Finance, the "White race/ethnic group" includes: White, Other (specified), Not Stated, and Unknown, and "Asian/Other race/ethnic group" includes: Aleut, American Indian, Asian Indian, Asian (specified/unspecified), Cambodian, Chinese, Eskimo, Filipino, Guamanian, Hawaiian, Japanese, Korean, Laotian, Other Pacific Islander, Samoan, Thai, and Vietnamese. In addition, caution should be exercised in the interpretation of mortality data by race/ethnicity. Misclassification of race/ethnicity on the death certificate may contribute to underestimates of Hispanics and Asian/Other death rates.[12]

Beginning in 2000, federal race/ethnicity reporting guidelines changed to allow the reporting of up to three races on death certificates. The race/ethnic groups in this report were tabulated based on the first listed race on those certificates where more than one race was listed. Race groups for 2000 are therefore not strictly compatible with prior years and trends should be viewed with caution.

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[10]Kochanek KD, Smith BL, Anderson RN. *Deaths: Preliminary Data for 1999.* National Vital Statistics Reports; Vol. 49, No. 3. Hyattsville, Maryland: National Center for Health Statistics, 2001.
[11]World Health Organization. *International Statistical Classification of Diseases and Related Health Problems. Tenth. Revision.* Geneva: World Health Organization, 1992.
[12]Rosenberg HM, et al. Quality of Death Rates by Race and Hispanic Origin: A Summary of Current Research, 1999. *Vital and Health Statistics,* Series 2, No. 128, National Center for Health Statistics, DHHS Pub. No. (PHS) 99-1328, September 1999.

Effective with 1999 mortality data, the standard population for calculating age-adjustments was changed from the 1940 population standard to the year 2000 population standard in accordance with new statistical policy implemented by the National Center for Health Statistics. The new population standard affects measurement of mortality trends and group comparisons. Of particular note are the effects on race comparison of mortality.[13] Age-adjusted rates presented in this report are not comparable to rates calculated with different population standards.

In addition, the population data used to calculate the crude rates in **Table 3** (page 6) differ from the population data used to calculate the crude rates in **Table 2** (page 10). Consequently, caution should be exercised when comparing the crude rates among the three health jurisdictions with the rates among the 58 California counties. Age-adjusted rates for city health jurisdictions were not calculated.

For a more complete explanation of the age-adjustment methodology used in this report, see the "Healthy People 2010 Statistical Notes" publication.[9] Detailed information on data quality and limitations is presented in the appendix of the annual report "Vital Statistics of California." [14] Formulas used to calculate death rates are included in the technical notes of the "County Health Status Profiles" report.[15]

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[13]Anderson RN, Rosenberg HM. Age Standardization of Death Rates: Implementation of the Year 2000 Standard. National Vital Statistics Reports; Vol. 47, No.3. Hyattsville, Maryland: National Center for Health Statistics. 1998.
[14]Riedmiller K, Bindra K. *Vital Statistics of California, 1999*. Center for Health Statistics, California Department of Health Services, April 2002.
[15]Schmidt, C. *County Health Status Profiles 2002*. Center for Health Statistics, California Department of Health Services, April 2002.

TABLE 1
DEATHS DUE TO SUICIDE BY RACE/ETHNICITY, AGE, AND SEX
CALIFORNIA, 2000
(By Place of Residence)

AGE GROUPS	DEATHS			POPULATION			RATES			95% CONFIDENCE LIMITS					
										TOTAL		MALE		FEMALE	
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE	LOWER	UPPER	LOWER	UPPER	LOWER	UPPER
TOTAL															
UNDER 1	0	0	0	556,635	284,653	271,982	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 - 4	0	0	0	2,225,385	1,138,537	1,086,848	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 - 14	24	16	8	5,567,090	2,851,540	2,715,550	0.4	0.6 *	0.3 *	0.3	0.6	0.3	0.8	0.1	0.5
15 - 24	327	268	59	4,615,641	2,395,832	2,219,809	7.1	11.2	2.7	6.3	7.9	9.8	12.5	2.0	3.3
25 - 34	499	410	89	4,998,216	2,643,192	2,355,024	10.0	15.5	3.8	9.1	10.9	14.0	17.0	3.0	4.6
35 - 44	653	495	158	5,751,694	2,942,371	2,809,323	11.4	16.8	5.6	10.5	12.2	15.3	18.3	4.7	6.5
45 - 54	589	427	162	4,469,059	2,221,466	2,247,593	13.2	19.2	7.2	12.1	14.2	17.4	21.0	6.1	8.3
55 - 64	332	236	96	2,756,954	1,343,573	1,413,381	12.0	17.6	6.8	10.7	13.3	15.3	19.8	5.4	8.2
65 - 74	262	217	45	1,957,505	901,472	1,056,033	13.4	24.1	4.3	11.8	15.0	20.9	27.3	3.0	5.5
75 - 84	320	275	45	1,305,454	533,995	771,459	24.5	51.5	5.8	21.8	27.2	45.4	57.6	4.1	7.5
85 & OLDER	106	86	20	449,762	142,364	307,398	23.6	60.4	6.5	19.1	28.1	47.6	73.2	3.7	9.4
UNKNOWN	1	1	0												
TOTAL	3,113	2,431	682	34,653,395	17,398,995	17,254,400	9.0	14.0	4.0	8.7	9.3	13.4	14.5	3.7	4.2
AGE-ADJUSTED							9.4	15.4	4.0	9.1	9.8	14.8	16.1	3.7	4.4
ASIAN/OTHER															
UNDER 1	0	0	0	67,434	34,501	32,933	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 - 4	0	0	0	266,651	136,640	130,011	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 - 14	2	1	1	660,070	339,469	320,601	0.3 *	0.3 *	0.3 *	0.0	0.7	0.0	0.9	0.0	0.9
15 - 24	32	24	8	604,654	309,566	295,088	5.3	7.8	2.7 *	3.5	7.1	4.7	10.9	0.8	4.6
25 - 34	57	46	11	649,462	328,916	320,546	8.8	14.0	3.4 *	6.5	11.1	9.9	18.0	1.4	5.5
35 - 44	36	25	11	698,724	339,157	359,567	5.2	7.4	3.1 *	3.5	6.8	4.5	10.3	1.3	4.9
45 - 54	40	32	8	561,189	265,710	295,479	7.1	12.0	2.7 *	4.9	9.3	7.9	16.2	0.8	4.6
55 - 64	17	7	10	317,872	151,006	166,866	5.3 *	4.6 *	6.0 *	2.8	7.9	1.2	8.1	2.3	9.7
65 - 74	17	12	5	217,081	95,695	121,386	7.8 *	12.5 *	4.1 *	4.1	11.6	5.4	19.6	0.5	7.7
75 - 84	25	19	6	123,907	53,227	70,680	20.2	35.7	8.5 *	12.3	28.1	19.6	51.7	1.7	15.3
85 & OLDER	7	3	4	38,153	16,296	21,857	18.3 *	18.4 *	18.3 *	4.8	31.9	0.0	39.2	0.4	36.2
UNKNOWN	0	0	0												
TOTAL	233	169	64	4,205,197	2,070,183	2,135,014	5.5	8.2	3.0	4.8	6.3	6.9	9.4	2.3	3.7
AGE-ADJUSTED							5.9	9.0	3.2	5.2	6.7	7.6	10.4	2.4	4.0
BLACK															
UNDER 1	0	0	0	37,159	19,020	18,139	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 - 4	0	0	0	147,839	75,557	72,282	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 - 14	2	2	0	414,580	210,046	204,534	0.5 *	1.0 *	0.0 +	0.0	1.2	0.0	2.3	-	-
15 - 24	25	20	5	356,933	188,930	168,003	7.0	10.6	3.0 *	4.3	9.7	5.9	15.2	0.4	5.6
25 - 34	41	34	7	352,200	185,909	166,291	11.6	18.3	4.2 *	8.1	15.2	12.1	24.4	1.1	7.3
35 - 44	36	30	6	388,391	189,399	198,992	9.3	15.8	3.0 *	6.2	12.3	10.2	21.5	0.6	5.4
45 - 54	19	13	6	287,837	135,895	151,942	6.6	9.6 *	3.9 *	3.6	9.6	4.4	14.8	0.8	7.1
55 - 64	11	7	4	168,721	78,536	90,185	6.5 *	8.9 *	4.4 *	2.7	10.4	2.3	15.5	0.1	8.8
65 - 74	8	6	2	105,627	46,350	59,277	7.6 *	12.9 *	3.4 *	2.3	12.8	2.6	23.3	0.0	8.1
75 - 84	4	3	1	60,380	23,176	37,204	6.6 *	12.9 *	2.7 *	0.1	13.1	0.0	27.6	0.0	8.0
85 & OLDER	1	1	0	18,268	5,491	12,777	5.5 *	18.2 *	0.0 +	0.0	16.2	0.0	53.9	-	-
UNKNOWN	0	0	0												
TOTAL	147	116	31	2,337,935	1,158,309	1,179,626	6.3	10.0	2.6	5.3	7.3	8.2	11.8	1.7	3.6
AGE-ADJUSTED							6.5	10.4	2.7	5.4	7.5	8.4	12.5	1.8	3.7
HISPANIC															
UNDER 1	0	0	0	267,741	136,840	130,901	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 - 4	0	0	0	1,055,221	539,226	515,995	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 - 14	6	1	5	2,296,937	1,173,481	1,123,456	0.3 *	0.1 *	0.4 *	0.1	0.5	0.0	0.3	0.1	0.8
15 - 24	109	87	22	1,609,062	832,517	776,545	6.8	10.5	2.8	5.5	8.0	8.3	12.6	1.6	4.0
25 - 34	107	92	15	1,793,492	998,691	794,801	6.0	9.2	1.9 *	4.8	7.1	7.3	11.1	0.9	2.8
35 - 44	109	81	28	1,643,440	880,073	763,367	6.6	9.2	3.7	5.4	7.9	7.2	11.2	2.3	5.0
45 - 54	59	48	11	978,139	498,051	480,088	6.0	9.6	2.3 *	4.5	7.6	6.9	12.4	0.9	3.6
55 - 64	21	15	6	506,398	246,133	260,265	4.1	6.1 *	2.3 *	2.4	5.9	3.0	9.2	0.5	4.2
65 - 74	19	17	2	320,415	146,540	173,875	5.9	11.6 *	1.2 *	3.3	8.6	6.1	17.1	0.0	2.7
75 - 84	17	16	1	161,694	67,052	94,642	10.5 *	23.9 *	1.1 *	5.5	15.5	12.2	35.6	0.0	3.1
85 & OLDER	2	2	0	56,213	18,817	37,396	3.6 *	10.6 *	0.0 +	0.0	8.5	0.0	25.4	-	-
UNKNOWN	0	0	0												
TOTAL	449	359	90	10,688,752	5,537,421	5,151,331	4.2	6.5	1.7	3.8	4.6	5.8	7.2	1.4	2.1
AGE-ADJUSTED							5.0	8.0	1.9	4.5	5.5	7.1	9.0	1.5	2.4
WHITE															
UNDER 1	0	0	0	184,301	94,292	90,009	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
1 - 4	0	0	0	755,674	387,114	368,560	0.0 +	0.0 +	0.0 +	-	-	-	-	-	-
5 - 14	14	12	2	2,195,503	1,128,544	1,066,959	0.6 *	1.1 *	0.2 *	0.3	1.0	0.5	1.7	0.0	0.4
15 - 24	161	137	24	2,044,992	1,064,819	980,173	7.9	12.9	2.4	6.7	9.1	10.7	15.0	1.5	3.4
25 - 34	294	238	56	2,203,062	1,129,676	1,073,386	13.3	21.1	5.2	11.8	14.9	18.4	23.7	3.9	6.6
35 - 44	472	359	113	3,021,139	1,533,742	1,487,397	15.6	23.4	7.6	14.2	17.0	21.0	25.8	6.2	9.0
45 - 54	471	334	137	2,641,894	1,321,810	1,320,084	17.8	25.3	10.4	16.2	19.4	22.6	28.0	8.6	12.1
55 - 64	283	207	76	1,763,963	867,898	896,065	16.0	23.9	8.5	14.2	17.9	20.6	27.1	6.6	10.4
65 - 74	218	182	36	1,314,382	612,887	701,495	16.6	29.7	5.1	14.4	18.8	25.4	34.0	3.5	6.8
75 - 84	274	237	37	959,473	390,540	568,933	28.6	60.7	6.5	25.2	31.9	53.0	68.4	4.4	8.6
85 & OLDER	96	80	16	337,128	101,760	235,368	28.5	78.6	6.8 *	22.8	34.2	61.4	95.8	3.5	10.1
UNKNOWN	1	1	0												
TOTAL	2,284	1,787	497	17,421,511	8,633,082	8,788,429	13.1	20.7	5.7	12.6	13.6	19.7	21.7	5.2	6.2
AGE-ADJUSTED							12.2	20.0	5.2	11.7	12.7	19.1	20.9	4.7	5.6

Note: ICD-10 Codes X60-X84, Y87.0; rates are per 100,000 population.
Year 2000 U.S. standard population is used for age-adjusted rates.
White, Black, and Asian/Other exclude Hispanic ethnicity.

* Death rate unreliable, relative standard error is greater than or equal to 23 percent.
+ Standard error indeterminate, death rate based on no (zero) deaths.
- Confidence limit is not calculated for no (zero) deaths.

The race/ethnic groups on this table were tabulated based on the first listed race on those certificates where more than one race was listed.

Source: State of California, Department of Finance, 2000 Population Projections with Age, Sex and Race/Ethnic Detail, December, 1998.
State of California, Department of Health Services, Death Records.

TABLE 2
DEATHS DUE TO SUICIDE
CALIFORNIA COUNTIES, 1999-2000
(By Place of Residence)

COUNTY	1999-2000 DEATHS (AVERAGE)	PERCENT	1999 POPULATION	CRUDE RATE		AGE-ADJUSTED RATE		95% CONFIDENCE LIMITS	
								LOWER	UPPER
CALIFORNIA	**3,080.0**	**100.0**	**34,072,478**	**9.0**		**9.5**		**9.2**	**9.8**
ALAMEDA	111.0	3.6	1,448,643	7.7		7.8		6.4	9.3
ALPINE	0.0	0.0	1,226	0.0	+	0.0	+	-	-
AMADOR	8.5	0.3	34,410	24.7	*	23.0	*	7.1	38.9
BUTTE	35.0	1.1	204,216	17.1		16.8		11.2	22.5
CALAVERAS	8.0	0.3	40,597	19.7	*	20.8	*	5.9	35.8
COLUSA	2.5	0.1	20,091	12.4	*	13.8	*	0.0	31.1
CONTRA COSTA	79.0	2.6	921,662	8.6		8.7		6.8	10.6
DEL NORTE	4.0	0.1	30,358	13.2	*	13.4	*	0.2	26.5
EL DORADO	20.0	0.6	156,996	12.7		12.9		7.2	18.5
FRESNO	61.0	2.0	800,121	7.6		8.5		6.4	10.7
GLENN	5.5	0.2	28,438	19.3	*	19.8	*	3.1	36.4
HUMBOLDT	22.0	0.7	127,658	17.2		17.1		9.9	24.2
IMPERIAL	12.5	0.4	150,381	8.3	*	9.3	*	4.0	14.6
INYO	2.5	0.1	18,348	13.6	*	13.8	*	0.0	31.4
KERN	65.0	2.1	662,472	9.8		10.9		8.3	13.6
KINGS	10.5	0.3	123,683	8.5	*	9.6	*	3.6	15.7
LAKE	10.5	0.3	58,335	18.0	*	15.2	*	5.5	24.9
LASSEN	5.5	0.2	35,208	15.6	*	16.2	*	2.4	30.1
LOS ANGELES	721.5	23.4	9,727,841	7.4		8.0		7.4	8.6
MADERA	9.0	0.3	121,779	7.4	*	8.0	*	2.7	13.3
MARIN	27.5	0.9	247,073	11.1		10.4		6.5	14.4
MARIPOSA	1.5	a	16,339	9.2	*	8.2	*	0.0	21.8
MENDOCINO	17.0	0.6	88,978	19.1	*	18.6	*	9.7	27.5
MERCED	18.0	0.6	210,707	8.5	*	9.7	*	5.1	14.2
MODOC	2.5	0.1	10,384	24.1	*	22.9	*	0.0	51.6
MONO	0.0	0.0	10,730	0.0	+	0.0	+	-	-
MONTEREY	25.0	0.8	395,133	6.3		6.8		4.1	9.5
NAPA	7.5	0.2	125,123	6.0	*	5.7	*	1.6	9.8
NEVADA	17.5	0.6	94,014	18.6	*	17.7	*	8.9	26.5
ORANGE	222.5	7.2	2,787,593	8.0		8.5		7.4	9.7
PLACER	23.5	0.8	233,836	10.0		10.3		6.1	14.5
PLUMAS	3.5	0.1	20,714	16.9	*	15.4	*	0.0	32.5
RIVERSIDE	162.5	5.3	1,519,469	10.7		11.1		9.4	12.8
SACRAMENTO	131.5	4.3	1,189,056	11.1		11.4		9.5	13.4
SAN BENITO	1.0	a	50,087	2.0	*	2.2	*	0.0	6.6
SAN BERNARDINO	171.5	5.6	1,688,984	10.2		11.5		9.7	13.2
SAN DIEGO	309.5	10.0	2,884,572	10.7		11.7		10.4	13.0
SAN FRANCISCO	88.0	2.9	788,975	11.2		10.4		8.2	12.6
SAN JOAQUIN	56.5	1.8	566,793	10.0		10.5		7.8	13.3
SAN LUIS OBISPO	28.5	0.9	247,880	11.5		11.3		7.1	15.6
SAN MATEO	58.5	1.9	735,381	8.0		7.8		5.8	9.8
SANTA BARBARA	42.5	1.4	408,292	10.4		10.8		7.6	14.1
SANTA CLARA	122.5	4.0	1,732,034	7.1		7.3		6.0	8.6
SANTA CRUZ	30.5	1.0	255,825	11.9		11.8		7.6	16.0
SHASTA	31.5	1.0	171,211	18.4		18.4		11.9	24.8
SIERRA	0.5	a	3,427	14.6	*	17.4	*	0.0	65.8
SISKIYOU	10.0	0.3	44,847	22.3	*	21.5	*	7.8	35.1
SOLANO	35.5	1.2	392,201	9.1		9.9		6.6	13.3
SONOMA	50.5	1.6	450,187	11.2		10.9		7.9	13.9
STANISLAUS	36.0	1.2	446,056	8.1		8.6		5.8	11.4
SUTTER	10.0	0.3	79,992	12.5	*	12.9	*	4.9	20.9
TEHAMA	10.0	0.3	55,806	17.9	*	18.9	*	7.0	30.8
TRINITY	1.5	a	13,353	11.2	*	8.7	*	0.0	22.5
TULARE	32.0	1.0	371,640	8.6		9.7		6.3	13.0
TUOLUMNE	8.0	0.3	54,631	14.6	*	13.0	*	3.9	22.2
VENTURA	62.5	2.0	744,825	8.4		9.1		6.8	11.4
YOLO	19.5	0.6	160,805	12.1		13.5	*	7.4	19.7
YUBA	10.0	0.3	63,062	15.9	*	19.0	*	7.2	30.8

Note: ICD-10 codes X60-X84, Y87.0; rates are per 100,000 population.

    * Death rate unreliable (relative standard error is greater than or equal to 23 percent.

    a Represents a percentage of more than zero but less than 0.05.

+ Standard error indeterminate, death rate based on no (zero) deaths.

- Confidence limit is not calculated for no (zero) deaths.

Source: State of California, Department of Finance, Race/Ethnic Population Estimates by County with Age and Sex Detail, 1970-1999, December, 1998.
       State of California, Department of Health Services, Death Records.